

EXHIBIT A

The Nagog Wastewater Treatment Facility (WWTF) is located in the Town of Acton, Massachusetts along the northern edge of a commercial business park. It was designed to treat sanitary sewer flow from office buildings, commercial and retail businesses, restaurants, single family residential homes and multiple unit condominium buildings. The activated sludge treatment facility was built in 1971 with upgrades in 1973, 1978 and 1997 to add additional capacity, fine bubble aeration, and denitrification. The facility discharges advanced treated and disinfected wastewater to rapid infiltration groundwater discharge beds. The facility unit processes include:

- preliminary treatment;
- flow equalization;
- comminution;
- aeration tanks;
- secondary clarification;
- effluent flow measurement;
- denitrification sand filters;
- disinfection;
- effluent pumping;
- rapid infiltration basin discharge to ground water; and
- chemical feed systems.

The wastewater collection system contains approximately 22,000 linear feet of gravity sewer, six collection system pump stations and one main influent pump station. The treatment system receives no direct gravity sewage flow. All wastewater flows by force main and/or gravity to the influent pump station where it is pumped to the headworks of the plant. Approximately 70% of the flow originates from single family and multiple condominium residential sources. The remaining 30% of the flow comes from commercial sources. There are no known industrial sources.

The WWTF operates under a Massachusetts Department of Environmental Protection (DEP) groundwater discharge permit (GW#1-18). The treated effluent is pumped to rapid infiltration sand beds. The discharge permit includes a flow limit of 200,000 gallons per day. Current DEP interpretation of permitted flow for groundwater discharge at Nagog is on a maximum day flow basis and not a monthly or a yearly average as is typical with surface water discharges governed by National Pollution Discharge Elimination System (NPDES) permits. A permitted flow value typically reflects the design capacity of the facility and is often not a discharge limit but a number used to calculate limitations on the mass of pollutant allowable in the discharge.

EXHIBIT B

Aboveground or underground tank	Tank #	Tank Size (gallons)	Tank Contents	Tank Age	Tank Construction	Type of secondary containment
Aboveground		300 gallons	Sodium Hypochlorite (Chlorine)	5 years	PVC	Tank within a tank
Aboveground		275 gallons	Diesel Fuel Feed Tank	5 years	Steel Tank	Concrete & masonry block spill containment area
Aboveground		500 gallons	Aluminum Sulfate Hydrate (Liquid Alum)	1 year	PVC	Concrete & masonry block spill containment area
Aboveground		500 gallons	Sodium Hydroxide	1 year	PVC	Concrete & masonry block spill containment area

Discontinued

Aboveground

61

55 gal

methanol

41 yr

Steel drum

Outside Bldg under roof in DCP approved containment area

EXHIBIT C

On December 18, 1997 at approximately 5:00 PM, a release of heating oil was observed from a connecting pipe between two 275-gallon aboveground storage tanks. The tanks, located outside the treatment building, were used to supply oil to a generator. It is suspected that water in the tanks collected in the connecting pipe and froze, causing expansion and breakage of the pipe. An estimate 275 to 300 gallons of oil was released.

Based on visual, olfactory and photoionization detector indications taken by Hydro-Environmental Technologies, Inc. and with DEP's approval, approximately 80 cubic yards of soil was removed under a Bill of Lading on February 3, 1998 and recycled into asphalt pavement materials at Amrec in Charleton, Massachusetts.

A class A-1 Response Action Outcome was completed which concluded that a condition of No Significant Risk had been achieved. A copy of the full report is available upon request.

No insurance claim was filed.

Exhibit D

I. SPECIAL CONDITIONS

A. Effluent Limits

The permittee is authorized to discharge into the ground from the wastewater treatment facilities for which this permit is issued a treated effluent whose characteristics shall not exceed the following values:

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>
Flow	200,000 gpd
Biochemical Oxygen Demand (BOD5) (5 Day at 20°C)	30 mg/l
Total Suspended Solids (TSS)	30 mg/l
Nitrate Nitrogen	10 mg/l
Total Nitrogen (NO2 + NO3 + TKN)	10 mg/l
Oil & Grease	15 mg/l
Total Phosphorus	1.0 mg/l
Fecal Coliform	200/100 ml/L

- a) The pH of the effluent shall not be less than 6.5 nor greater than 8.5 at any time.
- b) The discharge of the effluent shall not result in any demonstrable adverse effect on the groundwater or violate any water quality standards that have been promulgated.
- c) The monthly average concentration of BOD and TSS in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and TSS in the influent into the permittee's wastewater treatment facility.
- d) When the average annual flow exceeds 80 percent of the permitted flow limitations, the permittee shall submit a report to the Department describing what steps the permittee will take in order to remain in compliance with the permit limitations and conditions, inclusive of the flow limitations established in this permit.